EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Dana A. Gronbeck on September 10, 2009.

The application has been amended as follows:

The claims:

1. (Currently amended) A super light weight ceramic panel comprising a multiplicity of closed pore structures produced by trapping carbon dioxide gas generated via oxidation of silicon carbide and oxygen gas generated via reduction of iron oxide within a vitreous phase produced by expandable clay mineral and glass,

wherein the ceramic panel, is made of a composition, consisting of 90 to 98% by weight of an expandable clay mineral, 1 to 5% by weight of glass, and 1 to 5% by weight of silicon carbide, and

wherein the expandable clay mineral consists of 61.5 to 70% by weight of SiO_2, 15 to 20% by weight of Al_2O_3, 1 to 5% by weight of Fe_2O_3, 2 to 4% by weight of CaO, 1 to 3% by weight of MgO, 0.5 to 1.5% by weight of K_2O and 2 to 5% by weight of Na_2O,

wherein the closed pore has a pore density of 343 to 1000 pores/cm^3, and

wherein the closed pore has a pore volume of 74 to 89%, relative to the total volume of the panel.

Deleted: consists

Deleted: containing

Deleted: essentially

Cancel claims 17-19.

Notice of Allowance

The following is an examiner's statement of reasons for allowance: Note that the examiner's amendment is sufficient to overcome the art rejections and sufficient to place the instant application in condition for allowance.

Of the references of record, the most pertinent are Cowan, Jr. et al. (US 3,666,506) and Kurz et al. (US 4,071,369).

Cowan teaches a porous ceramic panel prepared from a ceramic composition comprising an expandable clay mineral, a foaming agent and an added flux in the form of sodium hydroxide and/or sodium silicate. The consisting of is sufficient to preclude the added flux from the claimed ceramic composition, which is a required component of the Cowan ceramic composition. As the pore density and pore volume are dictated by the ceramic composition and Cowan's ceramic composition fails to meet the ingredients set forth in the claim, Cowan does not disclose the pore density and pore volume in the ranges instantly claimed.

Kurz teaches a porous ceramic panel prepared from a ceramic composition comprising an expandable clay mineral, a foaming agent and a fly dust containing silica. The consisting of is sufficient to preclude the fly dust from the claimed ceramic composition, which is a required component of Kurz's ceramic composition. As the pore density and pore volume are dictated by the ceramic composition and Kurz's ceramic composition fails to meet the ingredients set forth in the claim, Kurz does not disclose the pore density and the pore volume in the ranges instantly claimed.

None of the prior art, taken alone or in combination, teach or suggest the ceramic composition and close pores with a pore density and a pore volume set out in the claim. Accordingly, the instant claims are deemed allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on Monday through Thursday, from 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hai Vo/
Primary Examiner, Art Unit 1794